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NOTICE OF ALLOWANCE AND FEE(S) DUE

22801 7590 05/05/2009

LEE & HAYES, PLLC
601 W. RIVERSIDE AVENUE
SUITE 1400
SPOKANE, WA 99201

EXAMINER

HUYNH, BA

ART UNIT

PAPER NUMBER

2179

DATE MAILED: 05/05/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/822,032	04/08/2004	Daniel J. Miller	MSI-0640USC1	2257

TITLE OF INVENTION: METHODS AND SYSTEMS FOR PROCESSING MEDIA CONTENT

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	08/05/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. **PROSECUTION ON THE MERITS IS CLOSED.** THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN **THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE** OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. **THIS STATUTORY PERIOD CANNOT BE EXTENDED.** SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail **Mail Stop ISSUE FEE**
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INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

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22801 7590 05/05/2009

LEE & HAYES, PLLC
 601 W. RIVERSIDE AVENUE
 SUITE 1400
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Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/822,032 04/08/2004

Daniel J. Miller

MSI-0640/USCI

2257

TITLE OF INVENTION: METHODS AND SYSTEMS FOR PROCESSING MEDIA CONTENT

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nonprovisional	NO	\$1510	\$300	\$0	\$1810	08/05/2009

EXAMINER	ART UNIT	CLASS-SUBCLASS
HUYNH, BA	2179	345-716000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a **Customer Number is required.**

2. For printing on the patent front page, list

- (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, 1
 (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 2
 3

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY AND STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent): ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

- ☐ Issue Fee
☐ Publication Fee (No small entity discount permitted)
☐ Advance Order - # of Copies _____

4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)

- ☐ A check is enclosed.
☐ Payment by credit card. Form PTO-2038 is attached.
☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature _____ Date _____
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This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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LEE & HAYES, PLLC 601 W. RIVERSIDE AVENUE SUITE 1400 SPOKANE, WA 99201			HUYNH, BA	
			ART UNIT	PAPER NUMBER
			2179	
DATE MAILED: 05/05/2009				

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 225 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 225 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability**Application No.**

10/822,032

Examiner

Ba Huynh

Applicant(s)

MILLER ET AL.

Art Unit

2179

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the interview and examiner amendment on 4/23/09.
2. ☒ The allowed claim(s) is/are 1-36.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Ms. Shirley L. Anderson on 4/13/09.

The application has been amended as follows:

The following listing of claims replaces all prior versions and listings of claims in the application.

Claims 37-39 are canceled.

1. (Currently Amended) A multi-media processing method comprising:

providing multiple tracks each of which is capable of being associated with one or more digital data streams;

providing a resize filter to receive the one or more digital data streams from multiple sources, the one or more digital data streams are defined to a user-defined level or set to a large size provided by a media source;

selectively representing the multiple tracks as a single track;

processing the digital data associated with the single track using a programmable software-implemented matrix switch in which multiple inputs can be routed to multiple outputs, the quantity of multiple inputs and the quantity of multiple outputs being scalable;

coupling one or more of a scalable plurality of input pins to a scalable plurality of output pins ~~[[of]]~~ by the ~~[[a]]~~ matrix switch filter in order to pass the one or more digital data streams; in response to the passing, reducing filter graph complexity, wherein computational and memory resources are reduced to improve performance;

identifying a transition point in the ~~content one or more digital data streams~~ and dumping at least a subset of an intervening ~~content-digital data stream~~ by the matrix switch filter, the ~~content-digital data stream~~ continues to be processed from a seeked point in the ~~content one or more digital data streams~~, the transition point allows the one or more digital data streams to occur without any lags in processing;

~~reducing filter graph complexity, wherein computational and memory resources are reduced; and~~

processing overlapping tracks based on a source of a track if the multiple tracks have not been represented as a single track ~~[[,]]~~ ; and

implementing core features of the matrix switch improves processing the one or more digital data streams as presented to a user.

Comment [SLA1]: Delete if you do not think this is necessary but this goes with the other section for:

selectively representing the multiple tracks as a single track

2. (Original) The method of claim 1, wherein said act of representing comprises representing at least one transition between at least two of the multiple tracks.

3. (Previously Presented) One or more computer-readable storage media having computer-readable instructions thereon which, when executed, implement the method of claim 2.

4. (Previously Presented) A computer system embodying the computer-readable storage medium of claim 3.

5. (Original) The method of claim 1, wherein said act of representing comprises representing at least one effect applied to at least one of the multiple tracks.

6. (Previously Presented) One or more computer-readable storage media having computer-readable instructions thereon which, when executed, implement the method of claim 5.

7. (Previously Presented) A computer system embodying the computer-readable storage medium of claim 6.

8. (Original) The method of claim 1, wherein said act of representing comprises representing at least one transition between at least two of the multiple tracks and at least one effect applied to at least one of the multiple tracks.

9. (Previously Presented) One or more computer-readable storage media having computer-readable instructions thereon which, when executed, implement the method of claim 8.

10. (Previously Presented) A computer system embodying the computer-readable storage medium of claim 9.

11. (Original) The method of claim 1, further comprising operating upon said single track by applying at least one transition between at least two of the multiple tracks.

12. (Previously Presented) One or more computer-readable storage media having computer-readable instructions thereon which, when executed, implement the method of claim 11.

13. (Previously Presented) A computer system embodying the computer-readable storage medium of claim 12.

14. (Original) The method of claim 1 further comprising operating upon said single track by applying at least one effect to at least one of the multiple tracks.

15. (Previously Presented) One or more computer-readable storage media having computer-readable instructions thereon which, when executed, implement the method of claim 14.

16. (Previously Presented) A computer system embodying the computer-readable storage medium of claim 15.

17. (Original) The method of claim 1, further comprising operating upon said single track by applying at least one transition between at least two of the multiple tracks, and at least one effect to at least one of the multiple tracks.

18. (Previously Presented) One or more computer-readable media having computer-readable instructions stored thereon which, when executed, implement the method of claim 17.

19. (Previously Presented) A computer system embodying the computer-readable storage medium of claim 18.

20. (Previously Presented) One or more computer-readable storage media having computer-readable instructions thereon which, when executed, implement the method of claim 1.

21. (Previously Presented) A computer system embodying the computer-readable storage medium of claim 20.

22. (Currently Amended) A method having computer-executable instructions being executed by a computer, the method comprising:

providing multiple tracks each of which is capable of being associated with one or more digital data streams;

providing a resize filter to receive the one or more digital data streams from multiple sources, the one or more digital data streams are defined to a user-defined level or set to a large size provided by a media source;

processing overlapping tracks based on a source of a track if the multiple tracks have not been represented as a single track;

grouping a particular set of operations on the tracks to provide a group upon which operations can be performed that do not affect tracks that are not in the group;

wherein the grouping comprises defining a first hierarchical tree structure that represents a media project of which the tracks comprise a part;

using the hierarchical tree structure to program a software-implemented matrix switch configured to process content of the tracks, the matrix switch being configured to route a scalable number of inputs to a scalable number of outputs;

coupling one or more of a scalable plurality of input pins to a scalable plurality of output pins ~~[[of]] by the [[a]] matrix switch filter in order to pass the one or more digital data streams;~~

in response to the passing, reducing filter graph complexity, wherein computational and memory resources are reduced to improve performance;

identifying a transition point in the ~~content one or more digital data streams~~ and dumping at least a subset of an intervening ~~content-digital data stream~~ by the matrix switch ~~filter~~, the ~~content-digital data stream~~ continues to be processed from a seeked point in the ~~content-one or more digital data streams~~, the transition point allows the one or more digital data streams to occur without any lags in processing; and

~~reducing filter graph complexity, wherein the computational and memory resources are reduced;~~

implementing core features of the matrix switch improves processing the one or more digital data streams as presented to a user.

23. (Original) The method of claim 22 further comprising operating on said tracks using said particular set of operations.

24. (Previously Presented) One or more computer-readable storage media having computer-readable instructions thereon which, when executed, implement the method of claim 23.

25. (Previously Presented) A computer system embodying the computer-readable storage medium of claim 24.

26. (Original) The method of claim 22 further comprising operating on said tracks using said particular set of operations, wherein said particular set of operations comprise at least an effect.

27. (Previously Presented) One or more computer-readable storage media having computer-readable instructions thereon which, when executed, implement the method of claim 26.

28. (Previously Presented) A computer system embodying the computer-readable storage medium of claim 27.

29. (Original) The method of claim 22 further comprising operating on said tracks using said particular set of operations, wherein said particular set of operations comprise at least a transition.

30. (Previously Presented) One or more computer-readable storage media having computer-readable instructions thereon which, when executed, implement the method of claim 29.

31. (Previously Presented) A computer system embodying the computer-readable storage medium of claim 30.

32. (Original) The method of claim 22 further comprising operating on said tracks using said particular set of operations, wherein said particular set of operations comprise at least an effect and a transition.

33. (Previously Presented) One or more computer-readable storage media having computer-readable instructions thereon which, when executed, implement the method of claim 32.

34. (Previously Presented) A computer system embodying the computer-readable storage medium of claim 33.

35. (Previously Presented) One or more computer-readable storage media having computer-readable instructions thereon which, when executed, implement the method of claim 22.

36. (Previously Presented) A computer system embodying the computer-readable storage medium of claim 35.

Claims 1-36 are allowed.

The following is an examiner's statement of reasons for allowance:

Independent claims 1 and 22, each when considered as a whole, are allowable over the prior art of record. Specifically prior art of record fails to clearly teach the processing of the digital data filtered by the resized filter using the software programmable matrix switch, wherein the matrix switch identifies a transition point in the content, dumping at least a subset of an intervening content, and continues to process the content from a seeked point in the content.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ba Huynh whose telephone number is (571) 272-4138. The examiner can normally be reached on Mon - Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Weilun Lo can be reached on 571-272-4847. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ba Huynh
/Ba Huynh/
Primary Examiner, Art Unit 2179